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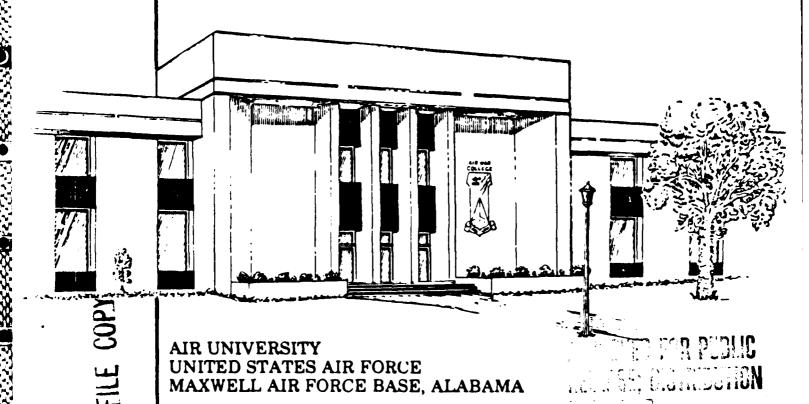
RESEARCH REPORT

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HEADQUARTERS AIR WEATHER SERVICE REORGANIZATION

By COLONEL CHARLES H. TRACY

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AIR WAR COLLEGE AIR UNIVERSITY

HEADQUARTERS AIR WEATHER SERVICE REORGANIZATION

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Charles H. Tracy Colonel, USAF

A RESEARCH REPORT SUBMITTED TO THE FACULTY

IN

FULFILLMENT OF THE RESEARCH REQUIREMENT

Research Advisor: Doctor Barton J. Michelson

MAXWELL AIR FORCE BASE, ALABAMA
MAY 1986



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AIR WAR COLLEGE RESEARCH REPORT ABSTRACT

TITLE: Headquarters Air Weather Service Reorganization

AUTHOR: Charles H. Tracy, Colonel, USAF

The Air Weather Service (AWS) headquarters is briefly reviewed along with the need to periodically update its organizational structure. Specific assumptions are documented prior to conducting a functional review of the Headquarters AWS. The 1977 Headquarters Organizational Review is analysed and assessed because of its <u>radical</u> departure from the current organizational structure. Next, a detailed functional review is conducted by the author and specific recommendations for reorganizing functions are made.

BIOGRAPHICAL SKETCH

Colonel Charles H. Tracy enlisted in the Air Force in 1960, participated in the Airman Education and Commissioning Program, attended Officer Training School and was commissioned in 1966. His weather officer assignments include tours as a unit commander at Kelly AFB, Texas; liaison officer with the Chinese Air Force in Taiper, Taiwan; Aide-de-Camp to the Air Weather Service (AWS) Commander at Scott AFB, Illinois; NATO weather plans officer at Ramstein AB, Germany; chief of the Weather Inspection Branch, MAC Inspector General and Director of Current Operations, Headquarters AWS at Scott AFB, Illinois. He received his BS degree in Meteorology from the University of Oklahoma and an MBA from Southern Illinois University. He has completed Squadron Officer's School and Armed Forces Staff College in residence. Colonel Tracy is a graduate of the Air War College, class of 1986.

CHAPTER I

INTRODUCTION

"Most organizations have a structure that was designed to solve problems that no longer exist." 1 J.W. Gardner's quotation is certainly fitting when speaking of Headquarters Air Weather Service (AWS).

Sensing that situation, the AWS Chief of Staff initiated a staff group in August 1984 to review the Headquarters AWS organizational structure. Unfortunately, that group did not accomplish its objective. Finally, in the spring of 1985, this requirement was deleted. However, the need for a thorough review of the headquarters organization remains as valid today as it did then.

Several complaints have been voiced during the recent past regarding inefficiencies in the current organizational structur.

Redundacy. Several areas within the headquarters demonstrate redundacy or overlapping of tasks. A prime example was the Defense Meteorological Satellite Program(DMSP). These responsibilities were shared between three distinct offices within the headquarters resulting in confusion on occasion as to what office had what responsibilities. A Headquarters Operating Instruction was finally published to help clarify certain DMSP responsibilities.

Working Groups. These groups were frequently formed for a variety of reasons. Each Deputy Chief of Staff was usually represented with at least one individual. Responsibility for completion and a final report was up to the chairman appointed for that working group. These working groups often competed for the priorities of the staff officers' time. So many working groups were formed that, in the spring of 1985, a separate group to manage the others was considered.

New Initiatives. The current structure often had difficulty in adequately handling totally new capabilites. As small computers began to proliferate the field units and Headquarters AWS, a strong need for small computer software configuration management developed. Initially, DCS/Operations assumed responsibility for developing procedures. Then the project was transferred back and forth and now rests within DCS/Systems.

The purpose of this research paper is to complete a review of the Headquarters AWS organizational structure with emphasis on <u>functional responsibilities</u>, <u>functional groupings</u>, and <u>management processes</u>. From this examination, the author should determine if a revised organizational structure is needed and, if so, propose such a structure.

CHAPTER II

HEADQUARTERS AIR WEATHER SERVICE

Before beginning a detailed analysis, it is important to set the stage; i.e., describe this organization called Air Weather Service (AWS).

Air Weather Service Mission

AWS is a technical service assigned to the Military
Airlift Command (MAC). AFR 23-31, <u>Air Weather Service(AWS)</u>,
clearly spells out the AWS mission.

The AWS provides or arranges for staff and operational weather services to active and reserve Air Force and Army units, designated unified and specified commands, and other agencies as directed by the Chief of Staff, USAF.1

Headquarters AWS Mission

The Headquarters AWS is an operational headquarters that directs the activities of six weather wings primarily aligned on a functional basis, Air Force Global Weather Central, and several direct reporting units and operating locations. As an operational headquarters, Headquarters AWS does not possess administration, personnel, or plans functions on any significant scale.

Headquarters AWS Organizational Structure

Appendix A is an organizational chart that clearly displays the present Headquarters AWS organizational structure. Basically, Headquarters AWS is functionally

organized and consists of a command section, four Deputy
Chiefs of Staff (DCS), an Executive office and Directorate
of Safety.

The DCS/Operations is responsible for the day-to-day weather support provided to the Air Force and Army minus special classified programs. The Headquarters AWS Guide states, "DCS/Operations is responsible for managing current field and centralized AWS operations to meet Air Force and Army requirements using existing resources and capabilities. This support is normally programmed or provided within the current to 2-year time frame." 4

The DCS/Systems is responsible for the special classified programs and management of development programs to meet validated requirements that are beyond current resources or technical capabilities. With the exception of special classified projects, DCS/Systems' support is normally confined to the time frame beyond two years. 5

The DCS/Aerospace Sciences is in charge of the technical and operational evaluation of forecasting and space environmental observing techniques. DCS/Aerospace Sciences is also responsible for validation of technical requirements and improving the technical quality of AWS products and services.

The DCS/Logistics manages both ground and airborne meteorological systems engineering, development, programming and logistics planning. This DCS is also responsible for a

myriad of tasks relating to contracting, Fixed

Meteorological Equipment Communications-Electronics

Authorization Program, Equipment Authorization Inventory

Data actions and the list goes on. Basically, this DCS

manages validated equipment acquisition and use.7

The executive Office is responsible for advising the AWS Chief of Staff on administrative matters, manages the AWS civilian personnel program, the security program and several other programs.

Finally, the Directorate of Safety manages all aspect of the command-wide safety program. 9

This quick broad brush look at Headquarters AWS is just that. Specific details will be addressed separately, as required, during the analysis of the headquarters.

CHAPTER III

ANALYSIS METHODOLOGY

Prior to beginning the analysis of the Headquarters AWS, the author conducted a literature search on current organizational theory. The enclosed bibliography lists the ones the author found of most interest. Next, the author carefully reviewed Headquarters AWS reorganizations or studies that have taken place since 1977. Of particular importance to this study, was the detailed organizational review completed by a task team in October 1977.

<u>Assumptions</u>

Before beginning the analysis of Headquarters AWS, certain assumptions were necessary.

- Headquarters AWS will continue to exist as a separate entity.
- 2. The efficiency and effectiveness of Headquarters AWS are affected by both organizational structure and management. This review will concentrate on the forganizational structure.
- 3. Any proposed organizational structure must conform to Air Force policy as prescribed in Air Force Regulation 26-2, Organization Policy and Guidance.
 - 4. Manpower authorizations cannot be increased.
- 5. The classified special projects function must maintain its separate and distinct status; i.e., the special projects directorate should not be broken up into parts

whereby the parts (Divisions) report to different bosses.

This assumption is important for insuring continuity in managing this sensitive classified function.

Discussion

This review concentrated on the <u>four Deputy</u> Chiefs of staff (DCS) only. The tasks of the command section, executive office and Directorate of Safety were not considered in this analysis since their tasks were not deemed as redundant, overlapping with other offices, or a problem for management.

The first step of this Headquarters AWS review was to concentrate on previous studies. The most all encompassing study was that conducted in 1977 by a special steering committee. It received a great deal of attention during this review. Other reorganizing efforts were limited to specific functions on a narrow scale such as the formation of the Army Support Division (DOJA) in 1984. That reorganization created a separate division to act as a focal point within the headquarters for Army support matters.

Next, each function of the four DCSs was listed separately and arranged in what the author considered a reasonable fashion. That arrangement was then compared to the present functional alignment and differences noted and analyzed.

Finally, the author considered these efforts in detail and offered recommendations and a final conclusion.

CHAPTER IV

On 1 October 1977 a report, An Air Weather Service

Headquarters Organizational Review, Final Report to Steering

Committee, was completed. That review was extremely

comprehensive and recommended almost a complete

restructuring of the headquarters. Appendix B lists the

proposed Headquarters AWS organizational chart. This review

cited many problems already identified in this paper. The

1977 organizational review was dealing with a headquarters

AWS that was considerably different from what exists today.

However, the recommended restructuring, along process lines,

has merit even today as it makes a strong case for assessing

Proposed Changes

responsibilities in a sequential order.

This proposed structure created four Deputy Chiefs of Staff (DCS): Requirements/Policy, Plans/Programs, Resources, and Operations. It also placed the Directorate of Special Projects directly subordinate to the Chief of Staff. To show how the new organization would function, an example related to meteorological sensors is described for each of the proposed DCSs.

The DCS for Requirements/Policy would have been responsible for 1) validating all current and future operational, research, and development requirements; 2) developing policy statements; and 3) AWS objectives. This

meteorological sensors as well as determining if presently installed sensors should be removed or replaced.

The DCS for Plans/Programs would have managed 1)
readiness planning, 2) operational and technical support
development, 3) studies and plans related to future
requirements, and 4) basic support for operations and
technical plans. This DCS would have developed concepts of
operations concerning the use of meteorological sensors.

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The DCS for Resources would have been responsible for 1) developing resources acquisition documents and initiating programming actions to obtain new AWS capabilities; 2) assisting MAC and AFCC in developing aspects of communication programs, 3) developing the engineering input for meteorological equipment programs; and 4) directing operational testing and evaluation of weather sensor systems and equipment. Here again, this DCS would have been heavily involved in the acquisition of meteorological sensors by preparing essential documents and managing the engineering and testing.

DCS for Operations would have been responsible for 1) the operational environmental support provided to the DOD, USAF, and Army; and 2) evaluating the effectiveness of that support. Again, related to meteorological sensors, this DCS would have established logistic supportability criteria and

developed procedures and directed actions for accounting, distributing, and storing such equipment.

Assessment of the 1977 Headquarters Review

The 1977 review definitely had merit. It was more process vice functionally oriented. This proposed structure provided for more accountability of responsibilities than existed in either 1977 or 1986.

Disadvantages to this structure included 1) placing increased workload on the Chief of Staff by adding the Directorate of Special Projects directly under his control, 2) diluting responsibility for many programs throughout the DCSs as shown with the meteorological sensors example, and 3) creating a totally new structure that would have taken a great deal of time to adjust to not only of Headquarters AWS personnel but also for the subordinate units. This proposed structure did not eliminate the problems of redundacy, overlapping of tasks, and splitting of expertise throughout the staff and was not implemented.

CHAPTER V

1986 FUNCTIONAL REVIEW

AWS Regulation 23-1, <u>Headquarters AWS Organization and Functions</u>, lists all functions of the DCSs. Each of these functions, plus a few other added by the author, was carefully analyzed to determine where possible redundacy and cumbersome management may require restructuring.

Not surprisingly, the groupings of functions fell into a similiar structure as exists today. Several areas were identified where minor reorganizations might be warranted. Appendix C displays the proposed organizational chart as a result of this review, and Appendix D lists the proposed functions of the DCSs and their subordinate directorates and divisions.

The remainder of this chapter will discuss specific issues raised during the course of this review. Stated another way, listed in the <u>Specific Issues</u> section of this chapter are the items a decision-maker should consider before implementing this structure in whole or part.

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Specific Issues

Special Projects Directorate (SYJ). Should this directorate be aligned under the Chief of Staff(CS), DCS/Operations, or remain aligned within the DCS/Systems?

The 1977 Organizational Review realigned SYJ directly under the CS. That review, as this one, assumed that classified special projects must remain a separate entity. 1

That group concluded that SYJ's "...functional tasks are spread across the entire management spectrum. Therefore, it will not logically fit under any of the new organizational DCSs and still remain a separate entity." It went on to point out that in the current organizational structure, "SYJ is only marginally related functionally to SY and relies a great deal on the expertise of other DCSs." The task team then logically concluded to align SYJ under the CS.

Such a recommendation has merit in 1986. However, the CS workload is extremely excessive and adding a separate, highly sensitive directorate under his direct, personal control could be the "straw that broke the camels back."

SYJ's current alignment under DCS/Systems is working now so why change it? First, DCS/SY's orientation is generally to the future—beyond two years. DCS/SY is responsible for development of plans, policies, and objectives to satisfy future environmental support requirements. Yet, a large portion of SYJ's responsibilities fall more into day—to—day operations; e.g., Space Environmental Support System and the Defense Meteorological Satellite Program to mention but two areas that constantly overlap with other staff offices throughout the headquarters. Also, efforts are now underway within the headquarters building to physically connect the SYJ offices with the DCS/Operations Readiness Directorate. Hence, it

may prove beneficial if these two directorates were managed by one DCS--DCS/Operations.

Operations Support Directorate (DOQ). This directorate manages organizational and mission directives, the AWS

Management Information System, and organizational changes.

Its primary task is to process and recommend validation of current and projected requirements for manpower. Here again, DOQ's alignment within DCS/Operations works well, so why change it? The primary reason would be to maintain a reasonable span of control for DCS/Operations with the move of SYJ to DCS/Operations. Also, a case could be made that DOQ's efforts are more long range in nature and could logically function well within DCS/Systems.

Directorate of Communications (DOK). DOK has, in the past, been involved in acquiring some communications equipment. Hence, should DOK be transferred to DCS/Logistics? A review of DOK's responsibilities, spelled out in AWS Regulation 23-1, does not reveal the charter to actually acquire communications equipment. They are responsible for developing and validating current and projected requirements for fixed communications equipment, circuits, facilities, and data flow. On the other hand, the DCS/Logistics responsibilities refer to ground meteorological equipment. Does "ground meteorological equipment" include communications equipment? That point is not clear in AWS Regulation 23-1 as a DCS/Logistics

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responsibility. Since DOK has primary responsibilities in developing policies and procedures for communications support, that directorate should remain within the DCS/Operations,

Forecasting Methods and Materials Division (DNTM). DNTM develops technical training materials, prepares technical weather training materials for aircrews and coordinates technical material developed by subordinate AWS units. Similiarly, the Training Directorate (DOT) develops policies, concepts, and standardized procedures for all AWS training programs. DOT also develops weather training materials for non-AWS personnel. It appears that DNTM and DOT could be combined into one directorate that would eliminate overlapping and result in greater economies of scale in the training arena. Hence, this study proposes a DOT with two divisions: one that develops training materials (DOTM) and one that manages training and educational requirements (DOTR). While not recommended in this study, a case could be made for aligning this training directorate in DCS/DN vice DCS/DO.

Worldwide Military Command and Control System(WWMCCS).

The responsibility for this function currently resides within the Centralized Operations Division (DOOX). The WWMCCS function has historically resided within DOOX because of the tie to AWS' centralized facilities. However, more and more this expertise is married to readiness issues.

Real-time crises of the recent past strongly suggest that this function should be transferred to the Operations Plans Division (DOJR).

Office of Primary Responsibility(OPR) for Individual Mobilization Augmentee (IMA) Training. Historically, the OPR for Air National Guard (ANG) and IMA training resided in the Training Directorate (DOT). The ANG OPR transferred to DOJ when the Army Support Division (DOJA) was formed. Likewise, the day-to-day management of the IMAs should rest in DOJ. DOJ is synonymous with readiness, and that is the purpose of the IMA program. In point of fact, DOJ is responsible for validating IMA positions. DOT should develop policies, concepts, and procedures for the IMA training program, and DOJ should implement it and manage the AWS program.

Acquisition process. This critical area frequently caused difficulties within the staff. The DCS/Operations was responsible for validating requirements; the DCS/Systems was responsible for preparing appropriate documentation and including it in the budget process; the DCS/Logistics then took action to acquire the equipment or other resources as required. Unfortunately, the process was not so clean. The new Air Force regulations (700 series) also caused a rethinking of how such business was completed. While this author believes the organizational structure in support of this process is correct, procedures must be developed to

efficiently handle this new process. Such management procedures are outside the purview of this paper.

Small Computer Software Configuration Management. As discussed earlier in this report, this function has needed an OPR for sometime. At the beginning of 1986, this function resided in the Studies and Analysis Directorate (SYX); however, consideration should be given to placing that responsibility in the Aerospace Services Directorate (DNT). DNT's primary responsibility is to manage technical programs to assess and improve meteorological products and services. That responsibility melds well with management of the small computer software configuration. Once software developed for meteorological products or services is approved, it should be retained in the Environmental Technical Applications Center and released only on the authority of DNT. Also, the Forecasting Services Division (DNTS) already includes technical management of small computer programs as one of its responsibilities. Further, DNTS is responsible for approval of DMSP data release as well as release of publications to foreign nations. Consolidating all release authority within one directorate of AWS will enhance effectiveness of this often complicated and politically sensitive task.

Management of Special Working Groups. As stated in the introduction, Headquarters AWS has often been inundated with special working groups to work both short and long term

issues. This practice is valid and extremely beneficial in focusing attention on a specific problem or issue.

Basically, the working groups are an example of matrix management in action. A chairman is selected and individuals are appointed to serve. Unlike most such organizations, the individuals on AWS' working groups are not normally sequestered but must continue keeping up with their normal, day-to-day functional responsibilities as well. Hence, they are forced to work for two bosses. While this situation is not optimal, it can be made to work and. in fact, must be in the era of limited resources. To make this system more efficient and responsive to higher management, \ one office is needed to manage these groups and assume responsibility for the final products. The Studies and Analysis Division (SYX) should be assigned the responsibility for managing and chairing all such working groups as appointed by the Chief of ${\sf Staff}$ The CS would establish the suspense date for the final report, determine the priority and turn over the project to SYX. SYX would then request the appropriate expentise from the various DCSs as needed and manage the working group from start to finish. Staff members selected to serve on the working groups would make their inputs and return to their normal duties as soon as feasible. SYX would be responsible for the final report.

Summary

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The items identified in this chapter constitute the proposed changes to the Headquarters AWS organizational structure as a result of this review. If implemented, this proposed structure should enhance the efficiency of the headquarters, but it will not resolve all of the management problems. Redundacy in such areas as the Space Environmental Support System and the Defense Meteorological Satellite Program would continue, Only continued coordination can ensure smooth operations in such areas. That may not be bad. No organizational structure can totally eliminate the need to coordinate with other staff offices. If all SESS expertise were consolidated into one office then that office must manage day-to-day operations, scientific and technical matters and the future or programatic issues as they relate to SESS. Such a project organizational structure is feasible but results in a very narrow expertise and cuts across the functional lines that have served AWS so well for so long.

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CHAPTER VI

RECOMMENDATIONS

The overall Headquarters AWS organizational structure is sound. The results of this study include the following recommendations.

- Realign the Special Projects Directorate(SYJ) to DCS/Operations from DCS/Systems.
- 2. Realign the Operations Support Directorate(DOQ) to DCS/Systems from DCS/Operations.
 - 3. Clarify the responsibilities of DCS/Logistics and the Directorate of Communications(DDK) on acquisition of communications.
 - 7 4. Combine the Forecasting Methods and Materials
 Division (DNTM) with the Directorate of Training (DOT).
 - 5. Transfer the WWMCCS function from the Centralized Operations Division (DOOX) to the Operations Plans Division (DOJR).
 - 6. The Operations Plans Division (DOJR) should assume management responsibilities of the IMA program from the Directorate of Training (DOT).
 - 7. Small computer software management should be transferred to the Directorate of Aerospace Services (DNT) from the Directorate of Studies and Analysis (SYX).
 - 8. The management of special working groups should be centered in the Studies and Analysis Directorate (SYX).

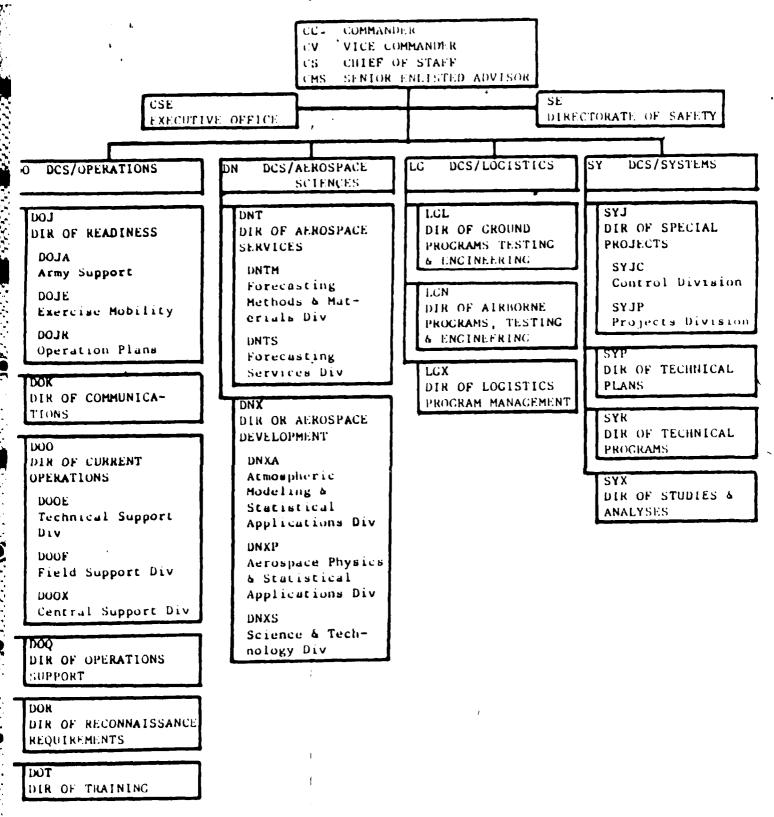
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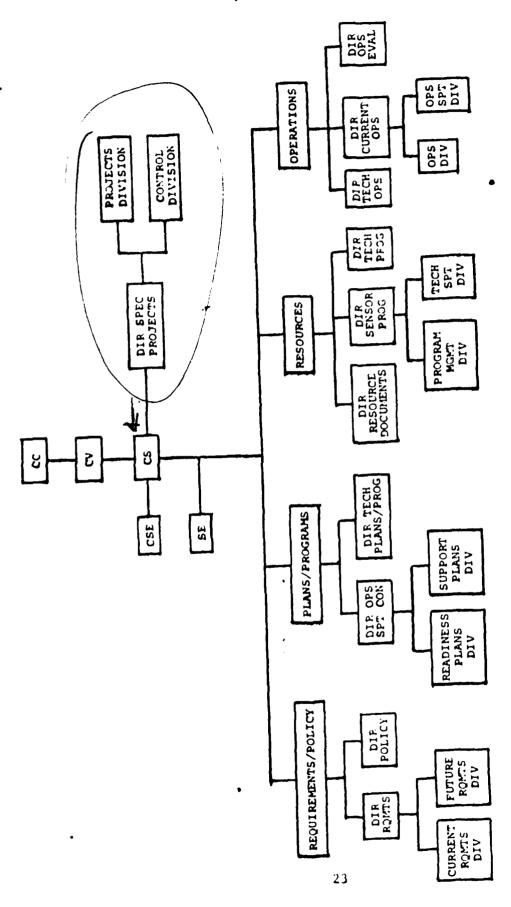
CONCLUSION

Periodically, an organization needs to conduct a self-examination to determine if it is effectively organized. The organizational structure is the primary means of controlling what goes on; 1 it is management's attempt to draw a map of whom it wants to do what. 2 Two structural orientations are constantly in opposition to each other--internal efficiency versus external effectiveness. According to a study on Air Force organization structures, "...an organization designed to maximize one will lose the other." 3 Hence, as management tries to reorganize, these opposing forces affect the final organizational structure and must be dealt with. The Headquarters AWS organizational structure is not perfect but is generally effective. As new technology and new Air Force procedures affect this structure, the overall organizational structure should be formally reviewed and adjusted as necessaary. It is extremely important for management not to divert too far from the organizational structure in controlling who does what jobs; i.e., organizational discipline is important on a day to day basis. When the organizational structure does not clearly define responsibilities, confusion and frustration of the staffers and inefficiency ultimately result.

It is important to remember that organizations constantly evolve. New commanders, DCSs, staff officers, regulations, procedures and numerous other external and internal forces constantly bombard the organization and eventually result in changes to the way business is done. As those changes gradually occur, they should be formally incorporated into the organizational structure to enable all to understand their responsibilities and get the job done as efficiently and effectively as possible.

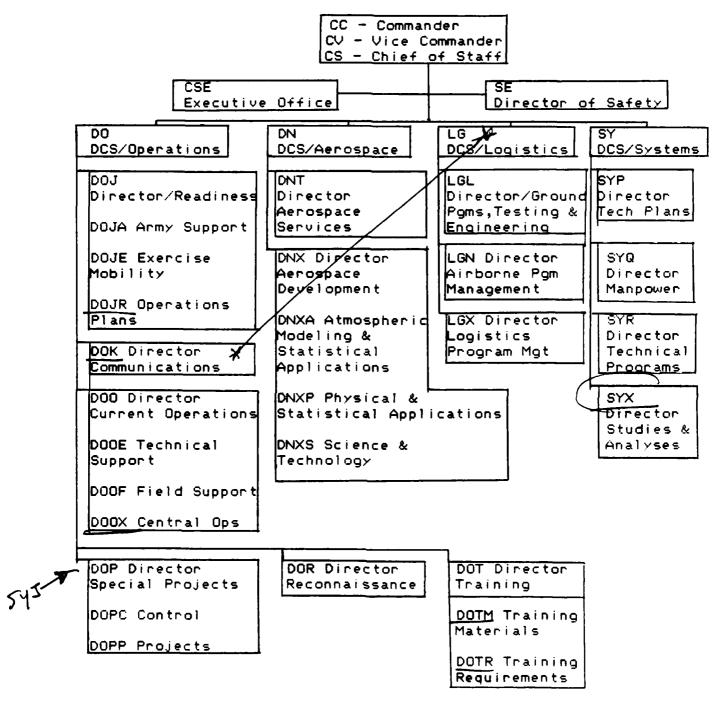
CURRENT HEADQUARTERS AWS ORGANIZATIONAL STRUCTURE





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PROPOSED HEADQUARTERS AWS ORGANIZATIONAL CHART--1986



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PROSPOSED FUNCTIONAL STATEMENTS DEPUTY CHIEF OF STAFF LOGISTICS

Directs engineering, operational testing and modification of ground and airborne meteorological equipment.

Manages ground meteorological equipment programming, operational supply, and logistics planning.

Service as AWS OPR for international, interservice, interdepartmental, and host-tenant support agreements.

Provides interface between AWS and other commands in matters concerning meteorological <u>and communication</u> equipment management, modification, and performance.

Manages AWS interests during the development and production of new meteorological equipment.

DIRECTORATE OF LOGISTICS PROGRAM MANAGEMENT (LGX)

Manages AWS ground meteorological systems programming.

Acts as focal point for AFR 11-4 and DOD agreements.

Acts as focal point on operational supply matters.

Acts as focal point for contract administration matters.

Maintains AWS asset listing and monitors inventory of <u>all</u> meteorological equipment (Both fixed and mobile).

Prepares and reviews logistics plans/annexes.

CONTROL PRODUCTION DESCRIPTION DESCRIPTION DE L'ANNO DE

Identifies logistic justification for meteorological <u>and</u> <u>communication</u> systems replacement programs.

Harmonizes replacement programs in POM with AFLC and AFCC.

Acts as focal point for Fraud, Waste, and Abuse programs.

DIRECTORATE OF AIRBORNE PROGRAMS, TESTING AND ENGINEERING (LGN)

Manages AWS engineering, acquisition, modification, and testing of airborne environmental systems.

(NOTE: UNDERLINING SIGNIFIES CHANGES FROM CURRENT AWSR 23-1 ATTACHMENT 3)

Provides liaison and advisory service to other commands on engineering and supportability of operational systems.

Monitors system performance and develops proposals for improvement of airborne meteorological equipment.

Manages the acceptance of new or modified airborne environmental sensors, equipment, and systems.

Performs engineering studies and analyses to insure equipment meets operational needs.

DIRECTORATE OF GROUND PROGRAMS, TESTING, AND ENGINEERING (LGL)

Manages AWS engineering, acquisition, modification, and testing of ground environmental systems.

Develops concepts for improving equipment and directs associated testing to verify improvement.

Represents AWS interests for ground meteorological <u>and</u> <u>communication</u> equipment maintenance, development, modification, and replacement.

Manages the acceptance of ground environmental sensors, equipment, and systems.

Performs engineering studies and analyses to insure new or improved equipment meets operational needs.

DEPUTY CHIEF OF STAFF OPERATIONS (DO)

Develops and implements policies and programs to provide environmental support to DOD, USAF, and USA.

Validates operational requirements, sets priorities, and acts as the focal point for employment of all field, weather reconnaissance, and centralized facilities.

Directs activities of HQ AWS direct reporting units functionally aligned under DCS/Operations.

Establishes operational and training requirements, concepts, and procedures for weather personnel and environmental sensor systems.

Directs programs pertaining to AWS readiness.

Directs weather aircrew standardization and evaluation programs.

Directs operational environmental data and communications programs.

Direct allocation and use of equipment.

Direct AWS resources in providing and/or arranging for environmental support to Sensitive Compartmented Information programs.

DIRECTORATE OF CURRENT OPERATIONS (DOO)

Manages the implementation of operational support. Develops policies and concepts, and standardized support procedures.

Manages the use of field and centralized environmental support resources.

Validates current and projected support requirements.

FIELD SUPPORT DIVISION (DOOF)

Processes and validates all forecasting and observing service requests; field requirements for centralized products; ground, upper air, <u>ocean-borne</u>, and airborne data requirements.

Validates current and projected manpower and ground sensor requirements.

Develops policies, concepts and standardilzed procedures for use and operation of meteorological sensor equipment and for all Base Weather Station support.

Processes IG reports; reviews, for adequacy, unit actions on operational findings.

Develops criteria for quality of field products and services.

Prepares directives on field operations.

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Coordinates support provided to Air Reserve Forces/Army Reserve Component.

Coordinates the use of non-AWS field products and services.

Manages AWS Self-Inspection Program.

Manages AWS Assistance Visit Program.

Publishes the AWS Operations Digest.

Interfaces with National/International Meteorological Agencies on field operations only.

Manages the DOD Weather Plotting Chart Program.

Manages the USAF Upper Air Program.

Processes selected annual AWS award nominations.

Manages AWS involvement in Air Force flying safety program, evaluates and executes on recommendations of accident investigation boards.

Manages significant events reporting for AWS.

CENTRALIZED OPERATIONS DIVISION (DOOX)

Develops policies and concepts for centralized support.

Coordinates exchange of centralized products and services with non-AWS centralized support facilities.

Recommends validation of centralized requirements for data.

Develops policies for management of centralized data bases.

Develops operational concepts for data acquisition systems to support centralized units.

Develops policy and concepts for operational Automated Data Processing Systems.

TECHNICAL SUPPORT DIVISION (DODE)

Directs preparation of and validates Weather Operational Support Plans (WOSPs).

Manages Air Force DMSP tactical programs and develops operational concepts, policies and procedures.

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Manages field operations of AWS space environmental support activities and develops operational concepts, policies, and procedures.

Manages support to electro-optical systems and develops operational concepts, policies and procedures.

Develops plans and manages AWS support to the Air Force Operational Test and Evaluation Center (AFOTEC) directed test programs.

Validates AWS support to the Space Transportation System (STS) and coordinates the Federal STS Memorandum of Agreement.

Processes selected annual AWS Award nomination.

Serves as HQ AWS focal point for Ground Launch Cruise Missile and OTH-B environmental support.

DIRECTORATE OF TRAINING (DOT)

Serves as interface with AFIT and ATC on training programs.

Represents AWS on the Weather Panel of the AF educational Requirements Board.

Validates current and projected training and educational requirements.

TRAINING MATERIALS DIVISION (DOTM)

Develops technical training materials for AWS personnel.

Develops weather training information for non-AWS personnel.

Prepares technical weather training material for aircrews.

Coordinates production schedules and adapts/approves technical material developed by subordinate AWS units.

TRAINING REQUIREMENTS DIVISION (DOTR)

Develops policies, concepts, and standardized procedures for all training programs.

<u>Develops current and projected training and educational</u>
<u>requirements.</u>

Processes selected annual AWS award nominations.

Manages HQ AWS Operating Location supporting the Air Training Command's Weather School at Chanute AFB, IL.

DIRECTORATE OF COMMUNICATIONS (DOK)

Manages AWS Communications Programs, AWS AWN functions/resources, and Global Weather Intercept Programs.

Develops and validates current and projected requirements for fixed communications equipment, circuits, facilities, and data flow.

Develops policies, concepts, and standardized procedures for communications support.

Coordinates AWS communications needs, data acquisition programs, and data exchange matters with non-AWS agencies. Note: Communication requirements must be worked through DCS/LG.

Establishes communications reliability requirements.

Serves as DCS/DO interface with AFCC on environmental communications programs.

DIRECTORATE OF READINESS (DOJ)

Manages actions to insure AWS resources are aready to support wartime operations.

Validates current requirements for tactical manpower, equipment, and communications.

Develops policies, concepts, and standardized products for tactical operations, exercise support, and mobility support.

Serves as the interface with HQ MAC and AWS wings on war planning and readiness activities.

MOBILITY AND EXERCISE DIVISION (DOJE)

Monitors tactical weather equipment use and location. (Monitors vice manages which is a DCS/LG responsibility).

Develops policies, concepts, and procedures for exercise support and mobility support.

Develops policies and integrates mobilization and exercise activities for ANG weather flights and AFRES mobilization augmentees.

Develops policies, concepts, and standardized procedures for tactical communications support. Develops and validates current and projected requirements for tactical communications.

Evaluates the readiness of trained personnel during exercises.

Manages HQ AWS Emergency Action Procedures.

OPERATIONS PLANS DIVISION (DOJR)

Directs AWS readiness actions for general wwn and contingency operations.

Develops weather service support concepts in contingency plans, mobility plans, and International Pact Organizatgion plans.

Determines AWS resources required to support general war and contingency plans. Recommends policies, concepts, and standardized procedures for tactical operations. Staff concepts and procedures to support Army tactical operations.

Acts as DO focal point for review of PROPs/PADs affecting current operations/programs.

Develops AWS position on International Pact Organization weather support issues.

Processes and recommends validation of WWMCCS current requirements. Recommends validation of automation hardware and software requirements in support of AWS WWMCCS support.

Acts as OPR for Individual Mobilization Augmentee (IMA) training accomplishment.

ARMY SUPPORT DIVISION (DOJA)

Acts as OPR for ANG Weather Flight training accomplishment.

Manages HQ AWS Operating Locations supporting the US Army Training and Doctrine Command.

Focal point for Army support matters within HQ AWS.

DIRECTORATE OF RECONNAISSANCE (DOR)

Validates current and projected reconnaissance support requirements.

Validates airborne mission and meteorological equipment requirements.

Coordinates implementation of operational support.

Develops policies, concepts, and standardized procedures for weather reconnaissance operations.

Coordinates reconnaissance support for non-DOD agencies. Manages the activities at OL G, HQ AWS.

Serves as ARRS and AFRES coordinator on weather reconnaissance matters.

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CONTROL CONTROL STATEMENT OF THE STATEME

Manages weather aircrew standardization and evaluataion programs. Manages the AWS aircrew flight manuals and training program.

Manages weather reconnaissance data acquisition. Identifies deficiencies and coordinates corrective action.

DIRECTORATE OF SPECIAL PROJECTS (DOP)

Develops policy and concepts for and manages all environmental support to classified special projects from conceptual through employment stages.

Approves studies and simulations in support of special projects. Identifies and documents requirements and initiates actions to obtain needed resources. Validates these requirements and directs appropriate AWS elements to provide or arrange support.

Provides guidance and monitors DMSP matters pertaining to special projects support.

Takes final AWS action on all clearance, access, and security matters relative to Sensitive Compartmented Information (SCI) programs. Serves as Command Senior Intelligence Officer (SIO).

Manages HQ AWS Personnel Reliability Program.

Provides administrative and technical direction and support to detachments and operating locations that support special projects.

CONTROL DIVISION (DOPC)

Manages Sensitive Compartmented Information (SCI) security programs for AWS.

Manages AWS SCI clearances and accesses. Provides SCI Staff Assistance Visit and inspection programs. Develops AWS SCI security policy.

Obtains, validates, prioritizes, and maintains AWS SCI billet structure.

PROJECTS DIVISION (DOPP)

Acts as AWS focal point for DMSP spacecraft matters.

Develops policies, concepts, plans, and standardized procedures for environmental support to classified special projects.

Validates, documents, and prioritizes requirements in support of special projects. Initiates actions to insure needed resources are obtained.

Manages studies, simulations, and technique development efforts in support of special projects.

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DEPUTY CHIEF OF STAFF SYSTEMS (SY)

Directs the development of plans, policies, and objectives to satisfy future environmental support requirement. Directs programs to analyze AWS ability to satisfy current and future requirements. Directs long-range technical planning and programming to acquire the resources to provide the required support.

Manages the AWS Commander's Resource Management Briefing.

Recommends allocation of manpower resources and organizational changes.

Plans and coordinates environmental support to USAF systems acquisition programs.

Monitors interageancy, interdepartmental, and governmental oversight activities affecting the planning and programming of AWS resources.

DIRECTORATE OF STUDIES AND ANALYSIS (SYX)

Manages and chairs all special working groups appointed by the Chief of Staff on a variety of subjects. Prepares final reports for proper processing.

Manages, develops, or coordinates studies and analyses to assess the value and operational utility of AWS support and to define current and future AWS deficiencies and needs.

Manages the AWS Value Analysis Program.

Directs AWS productivity improvement/enhancement initiatives.

Analyzes AWS functional capabilities and deficiencies.

Manages and applies the AWS Mission Area Analysis data base.

Develops economic and/or cost benefit analyses for current and future AWS programs.

Manages AWS participation in DOD operations research activities.

Interfaces with other DOD studies and analyses agencies and monitors DOD studies related to the value of weather support.

Manages Weather 2000 Study implementation.

Compiles and presents Commander's Resource Management Briefing.

DIRECTORATE OF TECHNICAL PLANS (SYP)

Manages long-range technical planning to provide future environmental support to USAF and DOD agencies.

Prepares AWS Capabilities Master Plan.

Develops plans for satisfying validated future requirements. Integrates US Army doctrine and concepts into AWS planning.

Acts as administrative focal point for PROPs/PADs.

Directs staffing of projects dealing with Executive/Legistrative branches of the Federal Government including the Federal Coordinator for Meteorological Services and Supporting Research.

Directs staffing of MAC, USAF, and DOD programming, planning, budgeting documents.

Manages acquisition support planning process (Excludes AWS-generated acquisitions).

Acts as HQ AWS focal point for DMSP programmatic and user-agency coordination matters.

DIRECTORATE OF TECHNICAL PROGRAMS (SYR)

Develops policies and concepts on operation of new and advanced weather support systems.

Prepares documentation to define and justify resources to satisfy validated requirements for environmental support that cannot be met by existing resources or capabilities. Acts as focal point for AWS-generated Statements of Operational Need (SONs), Military Construction Program (MCP) projects, Data Automation Requirements (DARs), Projected Automation Requirements (PARs) and System Development Notifications (SDNs).

Manages AWS Automated Data Processing (ADP) resource acquisition programs through implementation of the final operational capability (FOC).

Develops and staffs AWS Master Priority List.

DIRECTORATE OF MANPOWER (SYQ)

Manages organizational and mission activities.

Directs the AWS Management Information System.

Processes and recommends validation of current and projected requirements for manpower.

Develops and coordinates mission directives.

Processes organizational changes.

DEPUTY CHIEF OF STAFF AEROSPACE SCIENCES (DN)

Develops policy and programs related to AWS scientific and technical matters except for special project activities.

Directs the AWS Research Requirements Program.

Monitors R & D in atmospheric and space sciences.

Provides technical consultant service.

Develops policy for AWS technical publications.

Validates AWS technical requirements.

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Develops and implements policies and programs related to the Air Force Scientific and Technical Information (STINFO) Program.

Manages weather support software configuration for small computers.

DIRECTORATE OF AEROSPACE DEVELOPMENT (DNX)

Manages technical programs to improve AWS support capabilities.

Identifies AWS research and Development (R&D) needs to the Air Force R&D community.

Establishes the feasibility of new technology for satisfying AWS operational requirements.

ATMOSPHERIC MODELING AND STATISTICAL APPLICATIONS DIVISION (DNXA)

Develops technical concepts and methods in statistical meteorology, climatology, environmental simulation, and decision assistance to meet operational support requirements.

Provides technical advice on numerical weather prediction, tropical meteorology, and satellite remote sensing of the earth's surface and lower atmosphere (troposphere and stratosphere).

Identifies research and development in atmospheric physics and the space sciences needed to support operational requirements.

SCIENCE AND TECHNOLOGY DIVISION (DNXS)

Formulates and documents AWS Research Objectives (ROs) and Geophysical Requirements (GRs).

Monitors and reports on progress made to satisfy AWS research requirements (ROs and GRs).

Acts as focal point for the interface with the scientific community on technical requirements, programs, and conferences.

Acts as focal point and coordinates the transfer of the results of research and development activities into programs and procedures for routine operational use.

AEROSPACE PHYSICS AND SPACE SCIENCE DIVISION (DNXA)

Provides technical advice on the effects of atmospheric physical properties and space environment on military systems.

Manages technical programs involving weather modification, air quality monitoring, diffusion, atmospheric effects on electromagnetic radiation propagation, and space environment specification and prediction.

Identifies research and development in atmospheric modeling and statistical applications needed to satisfy operational support requirements.

DIRECTORATE OF AEROSPACE SERVICES (DNT)

Evaluates technical effectiveness of AWS forecasting procedures and products.

Identifies and documents forecast problems and deficiencies.

Provides technical guidance on meteorology and forecasting. Acts as focal point to resolve technical questions concerning forecasting, and aviation weather hazards.

Evaluates new forecasting techniques and assists DCS/Operations in their implementations.

Provides guidance on conduct of the AWS Technical Consultant Visit program; evaluates and disseminates supporting technical information.

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Manages the AWS Scientific and Technical Publications program.

Directs publication of AWS technical documents and reports.

Reviews and processes AWS technical papers for presentation at scientific meetings and/or publication in scientific journals.

Manages the AWS Technical Awards Program.

Manages DMSP data release approval.

Approves/disapproves AWS software release to DOD components; recommends approval/disapproval for all other software release requests.

<u>Validates the weather support software developed for use on small computers and manages this program AWS wide.</u>

NOTES

CHAPTER I (Pages 1-2)

- 1. John W. Gardner, "How to Prevent Organizational Dry Rot," H. Hicks, Ed., Management, Organization and Human Resources: Selected Readings. New York: McGraw-Hill Book Co., 1972, p. 47.
- 2. Memorandum, Hq AWS Chief of Staff to DCSs, Subject: Internal Organization of AWS Headquarters, 6 August 1984.

CHAPTER II (Pages 3-5)

- 1. Air Weather Service (AWS), Air Force Regulation 23-31 (Washington D.C.: Department of the Air Force, 10 April 1985), p. 1 (paragraph 2).
- 2. Letter, Headquarters AWS Operations Support Directorate (DOQ) to unaddressed offices and personnel, Subject: Hq AWS Guide, 14 March 1985, p. 1 (paragraph 3).
- 3. Letter, Headquarters AWS Operations Support Directorate (DOQ) to unaddressed offices and personnel, Subject: Hq AWS Guide, 14 March 1985, Attachment 1, p. 1-2.
- 4. Letter, Headquarters AWS Operations Support Directorate (DOQ) to unaddressed offices and personnel, Subject: Hq AWS Guide, 14 March 1985, p. 1 (paragraph 3a).
- 5. Letter, Headquarters AWS Operations Support Directorate (DOQ) to unaddressed offices and personnel, Subject: Hq AWS Guide, 14 March 1985, p. 1 (paragraph 3b).
- 6. Letter, Headquarters AWS Operations Support Directorate (DOQ) to unaddressed offices and personnel, Subject: Hq AWS Guide, 14 March 1985, p. 1 (paragraph 3c).

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- 7. Letter, Headquarters AWS Operations Support Directorate (DOQ) to unaddressed offices and personnel, Subject: Hq AWS Guide, 14 March 1985, p. 1 (paragraph 3d).
- 8. Headquarters AWS Organization and Functions, AWS Regulation 23-1 (Scott AFB, II.: Department of the Air Force, 25 July 1982), p. 4.
- 9. Headquarters AWS Organization and Functions, AWS Regulation 23-1 (Scott AFB, II.: Department of the Air Force, 25 July 1982), p. 5.

CHAPTER V (Pages 11-18)

- 1. <u>Headquarters Organizational Review</u>, AWS Final Report to the Steering Committee, 1 October 1977, Attachment 11 (paragraph 1).
- 2. <u>Headquarters Organizational Review</u>, AWS Final Report to the Steering Committee, (1 October 1977), Attachment 11 (paragraph 2).
- 3. <u>Headquarters Organizational Review</u>, AWS Final Report to the Steering Committee, 1 October 1977, Attachment 11 (paragraph 3).

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CHAPTER VII (Pages 20-21)

- 1. William B. Eddy, <u>Public Organization Behavior</u> and <u>Development</u>, (Cambridge, Massachusetts: Winthrop Publishers, Inc., 1981), p. 72.
- 2. J. W. Lorsch, "Organization Design: A Situational Perspective," <u>Organizational Dynamics</u>, (Autumn 1977), p. 3.
- 3. Dr. Edward J. Conlon, Dr. Richard L. Daft, Capt. Jeffrey S. Austin, Maj. Lawrence O. Short, <u>A Field Study of Air Force Organization Structures</u>, (Maxwell AFB, AL: Leadership and Management Development Center), 1984.

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